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ABSTRACT

The goal of this paper is to show how experience transcends subject-matter planning. Indeed, there is a paradox in planning authentic experiences; hence the word "quasi-authentic" in the title. Subject matters are defined here as disciplinary genres. They are integrated into a new framework for semiotic research into disciplinary didactics as a prototype discipline. The data that serve as the basis for what the article demonstrates relate to oral communication in elementary-level learning groups (of 9-year-olds). An analytic model is presented which indicates the reciprocal influence of the premises for action and contextual links in learning. The junction point between biographic knowledge and situated knowledge is under study here. The activity assigned to the pupils consists of devising an outgoing message on a telephone answering machine in order to produce an original and creative piece of group oral work involving each member. The paper uses the data to verify how authentic experiences diverge from planning. The data suggest that academic experience can only be authentic if it is organized on the basis of premises that serve as springboards for conceptual relations that are innovative and thus difficult to set criteria for. (Includes four figures; contains 36 references.)
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**When Quasi-Authentic Experiences
are "Enminded" into Disciplinary Genres:
Crossing Biographic and Situated Knowledge**

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Abstract

The goal of this paper is to show how experience transcends subject-matter planning. Indeed, there is a paradox in planning authentic experiences; hence the word "quasi-authentic" in the title. Subject matters are defined here as disciplinary genres. They are integrated into a new framework for semiotic research into disciplinary didactics as a prototype discipline. The data that serve as the basis for what the article demonstrates relate to oral communication in elementary-level learning groups (of 9-year-olds). An analytic model is presented which indicates the reciprocal influence of the premises for action and contextual links in learning. The junction point between biographic knowledge and situated knowledge is under study here. The activity assigned to the pupils consists of devising an outgoing message on a telephone answering machine in order to produce an original and creative piece of group oral work involving each member. The paper uses the data to verify how authentic experiences diverge from planning. The data suggest that academic experience can only be authentic if it is organized on the basis of premises that serve as springboards for conceptual relations that are innovative and thus difficult to set criteria for.

Keywords: disciplinary didactics, semiotics, genre, premises, situation models, indexation, groups, oral exchange

The role of didactics in enhancing content learning while preserving authenticity

The international educational trend called "didactics" seems almost unknown in the English-speaking world, though it represents a major movement in many non-English-speaking countries. The research and practice of didactics are based on the premise that we can construct a pedagogy for each subject-matter taught: a didactics of language, a didactics of mathematics, and so on. This conceptual movement rests upon very different assumptions than what was called "didactics" in the United States two decades ago. In its current form, it emphasizes the singularity of each teaching situation and attempts to integrate the academic content with theories of education and pedagogy. Traditionally, exponents of academic curricula have refused to consider pedagogy an object of interest. Thus, many have tried to construct states-of-the-art in each specific discipline and subject matter that would have nothing to do with pedagogy (Bertrand & Houssaye, in press). In contrast, didactic thought matches pedagogical needs and subject-matter knowledge. Each discipline is viewed through the lens of how it should be taught and learned according to its specificity; that is, how pedagogy should be enacted in particular disciplines because of the specific features of the subject matter. For this purpose, classroom interactions are studied in context to see how subject-matter signs and meaning are co-constructed and how the discipline is actualized into a particular pedagogy.

The emergent concept of "didactics" within the context of international educational tradition has been presented on only two occasions at AERA meetings: presentations were focused on didactics in particular places (German and Scandinavian countries, French-speaking countries). The goal of these sessions was not to broaden discussion by considering what this international trend might bring to American educational research and practice. The present paper addresses crucial issues related to the way specific meanings and signs are actualized within disciplinary frames (Gundem, 1992; Hopman, 1992; Tochon, in press). The emphasis here is on the "newness" of didactic trends in educational research. Indeed, didactics is a very lively field of research in many countries, and any old-fashioned associations that may cling to the word "didactic" in the English-speaking world should be dismissed.

Educational semiotics is a particularly appropriate field of analysis to welcome didactic research (Colomb, 1998). In fact, didactics may be defined as the study of how signs are made meaningful in specific disciplines. This paper addresses the extent to which a content-oriented way of seeing classroom interactions may shed new light on unsolved curriculum issues in the construction of school meaning. At a time when many American educators are seriously considering the advantages of the content-centered Japanese model of education, it seems crucial to invoke a compatibilist perspective. Now that we know that a key characteristic of expertise is specific content knowledge (Ericsson & Smith, 1991; Tochon, 1993a), we should emphasize the value of domain-related approaches to learning. In the didactic perspective, content-knowledge education is studied in terms of its necessary transformations within teacher-learner relationships.

The didactic model appears to balance the content-oriented and the pedagogy-oriented views of schooling; but in fact this educational perspective is not dual. It rests upon a semiotic triangle that has deep cultural implications. The constructive, cultural transformation of knowledge emphasized in research on teaching and learning (Shulman, 1990) is analyzed in terms of a relational triangle linking learner, subject-matter and teacher through diverse transformation processes. Schooling as well as classroom intercourse are analyzed within the relational possibilities of three moving loci: the teacher, the subject-matter, and the learner. Researchers working on the relationship between the German tradition of *Didaktik* and current U.S. curriculum research into classroom processes (for instance, Westbury, Doyle, & Künzli, 1993) find that *Didaktik*-based research on classroom processes is "the focus of much of the most exciting recent research on curriculum, teaching, and teacher education" (p. 1). They note that content has become an inert concept in most U.S. educational theory, and they emphasize that, until recently, content was not central to American education theory (p. 4) and that important issues may be studied at the intersection of content pedagogy (p. 5). The implications of this tradition and research perspective for American curriculum theory are promising. This way of thinking about each discipline may enhance the possibilities for practitioners to attune themselves to the crucial task of facilitating learners' access to specific knowledge cultures.

From subject-matter knowledge to actualization

In this perspective, in 1991 the research laboratory "Languages, Communication and Interaction in Education" was created to elicit ways of communicating and interacting at the intersection of teaching and learning in bilingual education. One aspect that was emphasized was the organization of oral communication workshops. For instance, we investigated how collaborative work can help students benefit from their more advanced peers and what subject-matter-oriented interventions help transcend erroneous premises. We inquired about motives that make collaborative group learning dynamic and support coherence in learning with peers. These are the kinds of questions analyzed in this paper. Collaborative learning in a particular discipline allows for transcendence of the separation between oral exchange as process and oral exchange as a product of learning. It helps scaffold competencies in listening and speaking while building quasi-authentic experiences of communication (Einbender & Wood, 1995; Wiggins, 1993).

Yet the notion of authenticity is presumptive, because preparation for the situations that will promote authenticity is actualized in a setting that is usually less than authentic. In a critical article on "the real thing, Terwilliger (1997) showed how dubious one should be about the possibility of designing classroom experience in a way that will be truly representative of performance in the field. The ways of producing authenticity in a school setting are still mysterious. Some clues, it is true, suggest there actually is authenticity in children's talk, but it is not clear that it serves school goals. Thus there is a gap between authentic experience as planned for the classroom and authentic experience as experienced in real life despite the artificial context.

I developed a model (Figure 1) designed to reflect the dimensions of this clash between practice and its scaffolding (Tochon, 1993a). The model rests upon the two axes of didactics and pedagogy. A non-dual dimension is at the junction point of both axes, that transcends the limitations of the Saussurean semiotic model. The axes are complementary yet design entirely different work spaces. The discipline's inner cultural space "enminds" action (if I may coin a term modeled on "embodies"). This content-specific enminding of action operates along the timeline

preceding and following the action. Action is but an expression of this inner culture, of the "mind" of the disciplinary understanding of upcoming situations and events in a classroom context. On this dimension, the disciplinary mind is diachronic. It is historic and follows the inner narrative of the events experienced through different classroom situations. It is on this axis that experience is semanticized, that is enminded in the particular vocabulary and genres of a particular subject-matter. This first axis of disciplinary goal-setting intersects with the second axis, the outer dimension of the present tense of pedagogy. For instance, inner intentions may be transformed in specific outer actions. This is the axis of pragmatization, that is the actualization of meaning-making experiences. Synchronic (present-tense) interactions move the inner world of the disciplinary culture and make it evolve. Thus there is an interconnection between the here and now of pedagogy and the historic mind of a discipline. The disciplinary culture evolves in learners' minds, teachers' minds, schools' inner cultures, and the inner world of research and scientific knowledge.

Certain researchers have referred to this model and proposed time strata valid in specific disciplines (Lacotte & Lenoir, in press). Altet (1994) and Gauthier et al. (1997) have shown the merits and the limitations of the model, which should not be reductively interpreted as a clash between "pure" planning and "pure" experience (Tochon & Munby, 1993). At the intersection between the axes, the inner worlds of didactics and pedagogy merge. A focal break-off point does exist. It represents a different dimension related to the emergence of meaning. One major attraction of this model is that it emphasizes this focal point at the convergence of both dimensions of school time and space. It is there that the disciplinary experience merges with disciplinary mind. Focusing research on this break-off point may support new ways of knowing school culture (Audigier, in press).

What makes school culture in a particular discipline? School dialogue, discourse, texts and signs, are the fundamentals of school culture in diverse disciplines. We understand them through events that are prototypes or samples of what should be done and learned in typical school situations (Entlewis, 1995). Schneuwly & Dolz (1997) propose considering the subjects of

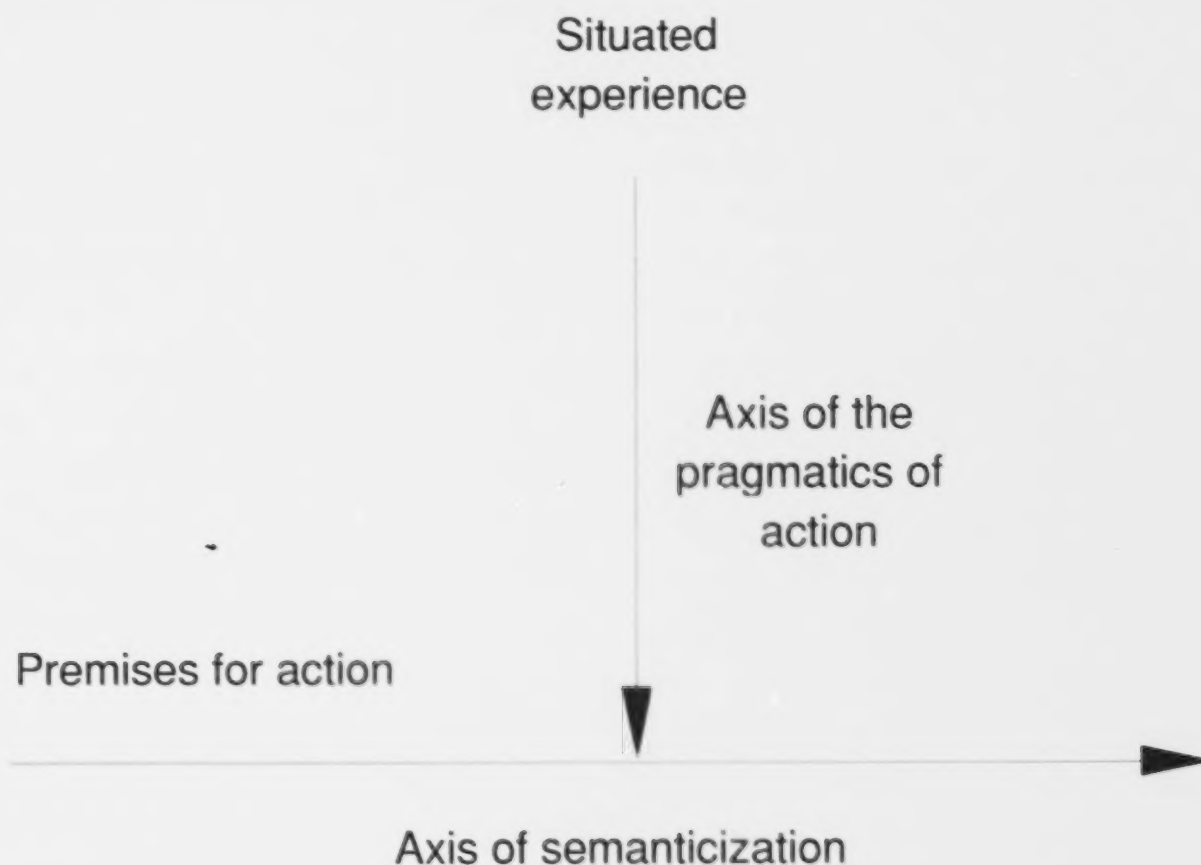


Figure 1. Model of the authentic learning situation

teaching as school genres. They write that disciplinary conceptions are modeled by subject-matter genres: the teacher understands what he or she teaches in his or her discipline through the prototype genres that assemble configurations of subject-matter knowledge. Thus the authors propose further analyzing the disciplinary subjects of teaching as a discourse that has been lexicalized and textualized to support teaching and learning. This approach is elegant in its simplicity and theoretical economy. It differentiates between the lived language of experience and the textualized wording of that experience for the purpose of communicating it. However, the instructional wording scaffolds an experience that is never fully caught in the words used to design the experience. At a given break-off point, the words have to become an experience.

The paradox involved here is the same as that of the model presented in Figure 1: (1) One has to design disciplinary practice to teach it and scaffold learning; for instance, teaching a child how to describe a prop emerges from a prior conceptualization of the situation of designing a prop; designing disciplinary practice makes it a genre — that is, a prototype of disciplinary reality. (2) This process of designing disciplinary experience relies on the belief that designing authentic experience in words will help provide means for teaching and learning further authentic experiences. However, there is no assurance that the words that design authentic experience will design authenticity in classroom communications. If designed practice defines school genres, and only school genres can be taught because one cannot access knowledge without prototypical links to reality, then it is far from sure that genres will match the same experience as the one designed into the words used to define it. Why? Because learning is not a matter of words alone.

Terwilliger (1997) stresses that the search for authentic experience "denigrates the importance of knowledge and basic skills as legitimate educational outcomes" (p. 24). It constitutes an elusive, even delusive, quest, because there is no criterion for authenticity. In this regard, Schneuwly & Dolz (1997) infer from the absence of fit between school genres and authentic experiences that we should find further criteria of validity with which to tightly define each didactic genre. One could define the criteria for each genre of experience more tightly, to find more rigorous ways to look at authenticity (Darling-Hammond, Ancess, & Falk, 1995; Lesh & Lamon, 1992). My own inference is that we will *never* be able to design precise criteria for experiential practice, but we *can* design premises that will scaffold some part of a learning experience, which — because it will be authentic — will escape our own initial wording. These different types of inferences lead research in opposite directions.

On one hand, it is supposed that because experience is not easy to put into words, words have to be refined to the point where they will come close to designing true experience induced by disciplinary scaffolds. On the other hand, it is argued here that criteria will never match the learning experience — and may actually prevent it from occurring; thus the search/research for authentic classroom experience should tend towards the finding of clues to *undefining* events so

that pupils will build their own disciplinary realities. Of course, if one tends in the direction of refining the criteria for school genres, no account will be taken of the risks of actualizing them—for instance teaching systematically children to lie in journal-keeping practice when asked about their feelings towards the subject-matter—and of possible adjustments when the planned and the experienced intersect. Indeed, there are limits to pursuing an investigation in a criterion-based direction: it cannot foresee all the criteria for authentic interaction; and if it did, would it still be authentic? On the other hand, the direction induced from the model I propose neglects the fact that not all authentic experiences will be allowed in a school context. Didactic premises have to be accompanied by ethical rules. There is a break-off point in any conceptualization one may build; and therefore the study of the intersection between experience and its wording for school purposes may represent one of the most promising paths for new research on ways of building experiences in a specific discipline, using signs and meaning as cross-structures rather than constant equations.

What I am examining here is the potential of this model, taking into account the break-off point between didactic genres specific to oral communication and their authentic acting out. Passage from the semanticization of a didactic genre to its pragmatization seems to be revealing of this break-off point in the examples cited in the present paper. Pragmatization refers here to the emergence of meaning in a situated experience, beyond its standardization.

Following this model (see Figure 1), didactics becomes operational at the intersection of the axis of praxeological synchrony. Didactic diachrony figures the before and after of learning-interaction in process of becoming, in which what has been forecast dissolves at the moment of exchange. The model explains how it may be possible to plan for didactic intervention and yet have the interaction partially elude semanticization. Didactic semanticization is the process used by learners, teachers, and didacticians to make explicit and thus standardize teaching and learning within a discipline. In simpler terms, it puts it into words. It leads to the lexicalization of certain teaching and learning actions and, as Schneuwly & Dolz (1997) write, to defining them as school genres.

The model and the data analyzed in this paper shed interesting light on the didactic break between the day-to-day and reference practices, a break that may occur on the axis of didactic semanticization but that cannot exist (as I shall try to show) on the praxeological axis of interaction. Analysis of language experiences in a school context shows that praxis forces transcendence of the practices put in place by semantic tools that represent authentic experience (which have become artifacts by virtue of their being represented). A reappropriation of the genre as an "other-authentic-thing" simultaneous with learning prescribes this result. This "other-authentic-thing" does not seem to be of the nature of a semanticized genre (assuming that semanticization is fluid and prototypical); but it is the product of a social activity defined by the goals and constraints of the situation and the people interacting in it.

To talk of teacher planning and forecasting is to talk of the possibility of stating the premises for the action of learning. The role of premises in making practice explicit has been explored by Fenstermacher (1994) in relation to taking into account the implicit matter that underlies teaching. While Johnson-Laird (1994) has successfully developed the Aristotelian concept of the premise and its role in reasoning, little work has been done on the explicit role of the premises for action in learning. The semantics of action is a topic that is as yet almost unexplored (Richard, 1990). I have worked on the semantics of action, seeking rules for the grammar of teacher actions (Tochon, 1993b). Here I will attempt a new foray into this field. The school genre constitutes a high-level frame of reference by reason of its actualization in action. It may be considered a situation model that supports interpretations (Kintsch & van Dijk, 1988; Fayol, 1992). Subject as it is to the context of its actualization and to individual premises, the situation model that the genre represents is remodeled, be it in the terms of another situation model articulated according to the pupil's premises, or be it in terms of an "other-authentic-thing," the idiosyncratic practice that we strive to pinpoint afterwards. In this paper, I will define experience as the transformation of action that allows for grouping together practices through indices of similarity (Vosdaniou & Ortony, 1989); it relates to attention and not exclusively to language. It constitutes the focal junction point between the dimensions of Figure 1.

I will be examining the way pupils put their learning into oral form by looking at possible answers to the following inductive hypotheses: (1) the premises for action that emerge from prior experience model pupils' inner world and thus determine success or failure at the task; (2) experiential familiarity with the context plays a determining role in the constructive process of learning. According to this model, the pragmatic links produced with experiential knowledge (whether biographical or situated) constitute the axes of learning and thus explain the importance of oral exchange in learning. If the data confirm this model, they will suggest methodological approaches for scaffolding these authentic experiences.

METHOD

Case study allows for analysis of the axis of the premises for action (the diachrony of learning in a didactic situation) and the axis of the pragmatics of action in the didactic situation itself in order to grasp inductively the viability and verisimilitude of the model proposed in Figure 1. Owing to the available space, this exploratory reflection (on the dimension of *Verstehen*) is modest. Those interested will find other explorations of the topic in Tochon (1996).

Task description

The learning situation I investigated is one of group learning of oral language arts. Different groups were observed during a process of communicative learning that consisted of coming to an agreement to jointly plan and produce a telephone answering machine message. The assessment criterion for the task was based on the quality of every pupil's contribution. Everybody had to say one bit of the message. One pupil had the job of showing how the telephone answering machine worked. After that, they divided up the planning and execution of the message. The aim was to jointly create an outgoing message in the vein of: "Hello, you have reached ... please leave" A child (the peer), a student teacher in practicum (the novice) and a qualified classroom teacher (the expert), having first learned together how to use a telephone answering machine, were then responsible for regulating one learning group each. The fourth-grade class was divided into three groups.

Participants

The study, which forms part of a larger research program, took place in the Eastern Townships of Quebec, Canada (the administrative region called Estrie). The level of schooling was elementary, and the children were nine years old. It involved 459 pupils, distributed in 63 learning groups in 21 classes. Groups consisted of an average of seven pupils. Peer group leaders were chosen by classroom teachers as being positive leaders in the class and capable of regulating a learning group. The student teachers were in third year in a faculty of education (the third year is the last before the diploma is conferred). Classroom teachers were qualified "associate teachers," that is, seasoned teachers chosen by the faculty of education, having shown very good ability to supervise practicums over the years and taken relevant training.

Research methods

In order to examine the role of the premises for action in learning on the diachronic axis, I referred to pupils' preactive and postactive verbalizations. Before or after the activity, pupils explained the premises and preconceptions that influenced them in their learning and how they made their experience explicit or semanticized it. To study the role of context «situation» as the foundation for the didactic pragmatization of the genre "answering machine message," I relied on activity-observation data supplemented by interviews with the classroom teacher and her student teacher. As we will see, the school genre is reprocessed in the learning situation and creatively metamorphosed into original practice.

Personal interviews with the pupils, the student teacher, and the classroom teacher were organized before and after the task. Verbalizations were recorded and then transcribed verbatim. The whole exercise was the object of the ethnographic note-taking and of time codification linked to learning strategies (which will not be reported on in this paper). In summary, the analysis relates to what was said by a certain number of pupils before, during and immediately after the task, with a view to studying how the premises of the experience and then the context of interaction articulated learning.

AUTHENTIC EXPERIENCES IN LANGUAGE LEARNING: PREACTIVE AND POSTACTIVE DATA

This section deals with the role of the premises for action in the learning of a particular discourse genre, the "answering machine message." The premises for action consist of knowledge emerging from prior experience that influences decisions on learning. Their influence is to be found in what pupils say about their learning of oral language arts. When incapable of responding to the context of the request and the kind of action put forward, the pupil moves to an encompassing model that, for example, handles the situation rather than the direct problem presented. This experiential knowledge of a superior nature, whose role is strategic, responds to context in a general fashion by allying itself with the premises for action. One often encounters it in competition with the subject of teaching. This is characteristic of authentic situations in which real life carries the day over lesser considerations of the taxonomy of school goals. In such cases, it is the teacher's job to help pupils reflect on their premises. I will be examining below the valid reasons why pupils answered incorrectly questions that were put to them when they were preparing an answering machine message. These reasons generally have to do with a model of the situation as experienced. Let's look at these situation models, which form the premises of learning.

The role of premises in understanding

As suggested by the following excerpt, the premises on which action is founded are closely linked to the interpretation of the context of the task: *"I had time to think about it, but ... what I thought was that with answering machines, you have to give all the information possible so people will call you back."* A situation model is a manner of understanding the situation and of situating one's intentions in this context as interpreted. Some models help learning, even when partial or incorrect. In the images used by certain pupils, one sees positive analogies that aided learning and task integration. For instance, one pupil saw the didactic situation as a situation of oral composition which, for her, evokes other situations that she has enjoyed; for this reason, she

thanks the researcher: *"It's just like writing a composition, making up a little story. Thank you for asking me these questions; I was glad to meet you; it's fun to be with you."*

A lot of pupils need to imagine a fictional situation that explains their task and gives it meaning. They situate their action within a scenario: *"I thought of: 'Hello, you have reached Jess James. Leave your name and phone number and I will call you back after the sound of the tone.'"* Obviously, the outgoing message suggested by this pupil incorporates an element of confusion. Jess James will be calling back long after the sound of the tone. For the children, the sound of the tone is a sign that things are working: *"That's when you call home and it goes beep and it's working, and then you talk."* An understanding of the answering machine is gained through an interpretation of the situation in which one uses it. This overall interpretation would seem superordinate to an understanding of the purpose of the instrument, the nature of the messages, and the nature of the instrument and its operation. It might seem at first blush that you could operate a machine without necessarily grasping its context of use; and yet on the contrary, for many pupils, development of knowledge and know-how seemed to be subject to overall premises relating to the use situation. This state of affairs confirms Bereiter's theory (1990, p. 603) on the primary role of "contextual modules" in learning: these intentionalized and relatively autonomous models of interpretation determine the way learning is perceived. Here, for instance, is the case of a pupil who didn't learn how to operate the answering machine because of a premise that prevented him from going any further. This pupil's premise is that answering machines are useless and in fact harmful. They harm private life and can make personal information public. This anti-answering-machine bias influenced the pupil's perception of the didactic situation and comes through very clearly in the child's oral explication; unless he works on this preconception by objectivizing the source of the problem, the learning will not take place:

Well, say there's somebody you haven't seen for a long time, and there's an answering machine, and the person's not there. You call him, and you tell him stuff that you wanted to tell him, just like he was on the phone. I don't have an answering machine, and I wouldn't want one, because when I'm not home and my friend wants to tell me something

personal, say it's my father or my mother or my sister that takes the message, they're going to know what other people told me, personal stuff. It's never happened to me, but I hope it doesn't happen to anyone. Like when my mother called her sister Christine [fictitious name], I can't remember what country she lives in any more, she said [changes tone, becomes serious], "Christine, I wanted to tell you that the house is being renovated. We have a pool and we have a dog." She went on saying stuff like that, stuff that we'd gotten, what age I was and my sister was. And then my mother said to call her back, but she hasn't called back yet, but I know she will soon. I don't know how it's used.

This pupil has good reason not to take action to learn how to operate an answering machine. Discretion is the better part of learning.

Incorrect knowledge of the action and erroneous premises

Children who think they have understood everything about electricity may for that very reason entertain premises that prevent appropriate action.

Well, you put it.... See, it's on [the red light comes on]. It's plugged into a socket. You press a button, that's play [the wrong button], it records, and after that you press stop. When you go out ..., you put it on off [wrong]. I used to have one but it doesn't work any more. You press ... leave it on on. The telephone rings, now you put it on play, it'll play the recorded message when you're done.

This pupil has understood that, for the answering machine to work, the owner must be right next to it when it receives calls and press buttons in the course of the procedure, while phone calls are made. Here is one more misunderstanding noted by an observer of the project: *"In the peer-regulated group it was not understood how the message was checked. Each time the group leader or other pupils who touched the instrument pressed OGM play, in their minds it was necessary to rewind the cassette. They didn't notice that the instrument did it automatically."* When the premise one is acting on to operate the answering machine indicates that rewinding

is necessary, one rewinds by any means available, even, if need be, removing the cassette from the answering machine to do so and turning it over.

Another instance: some pupils are *imagining* out loud how the answering machine works: "Well, play, you press that and the machine works. And stop, that means it's going to stop, and memo, well I don't know what that is." In cases like this, it would seem that the premise for action has more to do with saving face than with providing correct information. Thus certain premises can impede success or clothe it in curious garb in accordance with overall strategies that are subject to elucidation. Let's go on to analyze the premises for action that condition the learning of certain pupils. Here a pupil is commenting on the procedure adopted to operate the answering machine (he is thinking aloud as he acts; this is his second attempt):

I think this is how you record [correctly presses the OGM rec button]: "Hello, you have reached Jess James. Please leave your name and phone number at the sound of the tone." Done! [incorrectly presses the playback button to check. Hears an incoming message, not his own message.] That's not what I said!

This French-speaking pupil understands the English word "play" and has forgotten that he should press the other button (Figure 2a).

Thus some failures in know-how seem to be based on a premise for action. For example, one pupil thinks he can't make the answering machine work because he's not expecting a telephone call and he can't be telephoned at school. With a group, he operated the answering machine correctly, having recorded an outgoing message with the other pupils; once left alone with the answering machine he is inhibited by the premise "It can't be done." This argument that obtains at a higher level prohibits the putting into action of propositions subordinated to it that dictate the procedure for recording a message:

I don't know, because I don't know if we can make a message. If we call one of my friends and he has one, well then we can make a message. He'll tell you he'll call you back, but he might not call back, instead he might come to your place. That's all.

This child is mixing up the outgoing message with the incoming message. To accomplish the task, he would have to be at home (Figure 2b).

One pupil was so struck by the contrast between the answering machine in class and the state-of-the-art answering machine of a friend of hers that she used this as the basis for justifying her lack of know-how about using the classroom machine following the group learning session (Figure 2c):

Can we say a message that we can put on the machine? Let's say someone calls and you're not home. "I am not in a position to take your call right now, please leave your message after the sound of the tone." That's all I thought of. I don't know how to record it. You'll have to show me. When I call my girlfriend, there's always a machine on. The one my friend has when I go over to her place, it's got more buttons over here, because it's an answering machine, and it's also a machine that records numbers [she explains how the other answering machine works and the way it records numbers]. Her thing has a bigger cassette, about so big. Her thing, you can leave it on just one setting when you speak into it. When you record with that answering machine, there's just one volume. There's no volume button. This one has one, but hers doesn't.

This premise for action supplants the proposed subject of instruction, which she constantly brings back round to a practical situation. As well, some pupils say they can record their messages but they don't feel like it:

I forgot that to record the message, you have to put a cassette in. You had to leave the message on the answering machine so that when you came back home, the person who called you, you could call them back, or they could call you back. I said what button you have to press: memo [wrong button]. "I've gone out somewhere, I'll come back to call you as soon as possible." Yeah, I could record it. Well, yeah, we could do that, but I don't feel like it.

Here, the premise transforms the school genre proposed to the pupil into inaction, whose authenticity escapes a normative semantic description.

In this section we saw that certain premises for action constitute higher-level situation models that condition learning and can either facilitate it or handicap it. They compete with the didactic genre presented by the teacher, which is reinterpreted as experience dictates. These premises seem to act, through embedding, on the spheres to which they delegate their characteristics. It is possible to elucidate these premises. Dialogue with the teacher plays an essential part in learning. These premises seem to determine the triggering of the semantic networks that will allow access to appropriate learning and know-how. Thus there is an intimate relationship between situational interpretation and access to the knowledge and know-how articulated by a specific genre. Learning language arts means basing oneself on premises in order to imagine their relevance in a new context of action and exchange. It is for this reason that it is important for the teacher to develop strategies for explication.

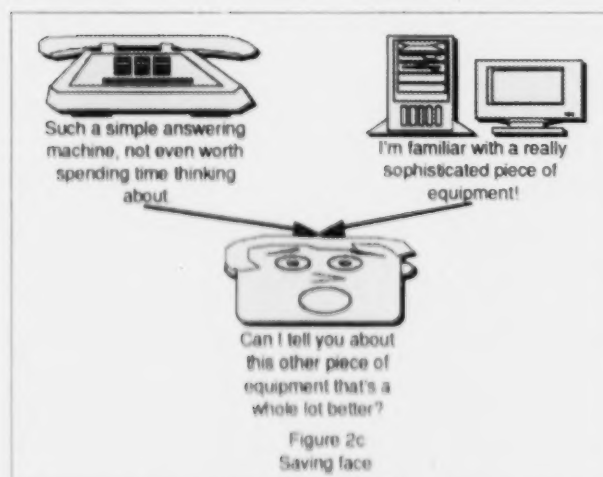
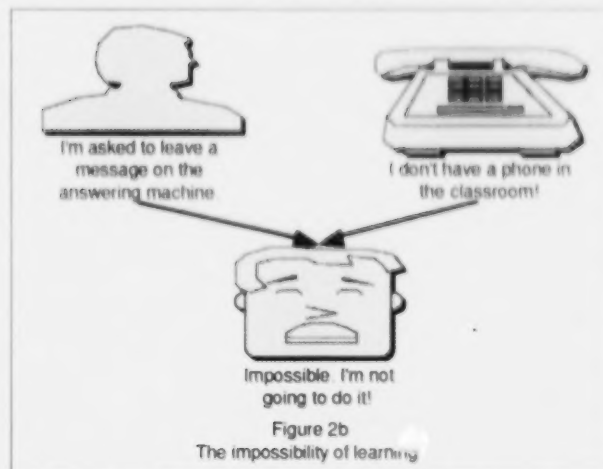
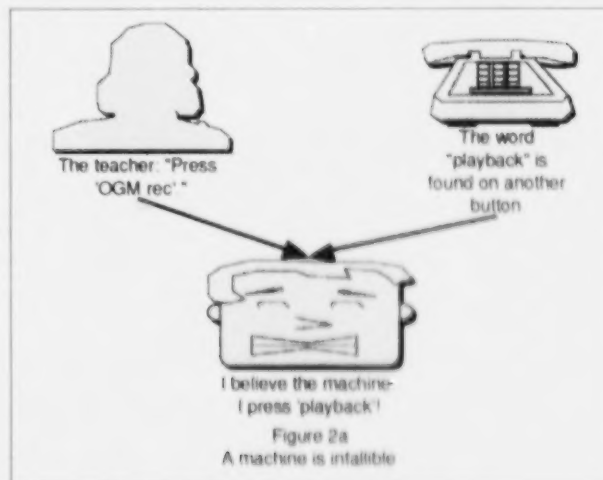


Figure 2 Premises that lead pupils into error

AUTHENTIC EXPERIENCES IN LANGUAGE LEARNING: INTERACTIVE DATA

Experiential knowledge of the context likely plays a determining role in the creative process of learning. The links made by experiences tied to the learning situation probably constitute one of the methods of learning, if the pupil is allowed a certain degree of freedom to explore this context. This influence of the context of the experience is not entirely determined by didactic situations molded as subjects of instruction. In other words, practice partly eludes instructional intentionality. This constitutes the subject of analysis of the present section: we will examine the links between experience and situation in group learning — and to talk of a learning group is perforce to talk of dialogue and oralization. Oralization consists of verbal explication of one's premises or one's action.

The technical term for the conceptual link made between kinds of knowledge is *indexation*. The entry words in the index of a book, for example, point to passages that are linked. Indexation is the foundation of creativity and explains the conceptual links between blocks of information. Indexation is very probably a mode of learning, whence the importance of dialogue about the task in hand. Significant cases of indexation were found that gave rise to change in the work of learning groups in language arts. Before expressing a comprehensive point of view on the events that influenced pupils' knowledge in accomplishing their task, I would like to narrate a few cases encountered in the course of classroom experience.

The first instance of a link between experience and situation took place in a rural school. Here are some indications drawn from my log. It was an early spring morning. I had intended to arrive after the morning recess and had spent fifty minutes driving along a winding road through flat country and past hills where snow was melting in the sun. At last I reached a village and arrived at a school with high ceilings and high windows, and enormous classrooms housing only some fifteen pupils or so. The classroom I was going to faced east; so did the adjoining room, where I was able to talk to the classroom teacher and her student teacher before going to get the pupil

who, with them, was going to learn how to operate an answering machine and then regulate a learning group.

At the outset the experience unfolded tranquilly, and I had started recording our observations in the appropriate spaces. For example: "10:50-10:50:30: exploration of answering machine by a child; 11:05: Michael comes to complain of Véronique who is lying stretched out on the table; 11:11: Audrey comes to ask me if I have a hanky." The classroom teacher, having provided some explanations, had done a walkabout, encouraging each child to leave a message and thus promoting individual work. All the other children listened and waited their turn. Just then I noticed that the peer-regulated group was distracted. The weather was beautiful and we were just coming out of a grey period. The children were all grouped near the window and were looking outside. A blue jay was on the tree whose branches came close to touching the great bay windows. The children opened the window slightly and a fresh breeze came into the room. The teacher got up to make an observation but changed her mind. It was the first fine day, and the children's attitude was unaccustomed, intriguing. They were listening to something. Seeing them gathered round the window in the sun was somewhat touching. They were listening to the birds.

The class was silent, and close to the window, the children began to tweet. Then the teacher asked what they were doing. The children explained their plan. One of the pupils knew someone who recorded messages at home with music in the background, and they wanted to record their message with birdsong in the background. The teacher gave them permission to do so. They recorded near the partly open window by bringing the answering machine close to it (see Figure 3).

The whole of their message was focused on birdsong and springtime. The emotional coloration of their production and the form their learning took was guided by the indices of their immediate setting. The group's learning was not just facilitated by this situation model; this contextual experience, in fact, was integrated into the task and constituted the framework for their efforts. The framework of the work was no different from the framework of their experience. The link

made, within the situation, between their task and their setting served as the foundation for their group learning, and very likely as the motivation that led them to creatively accomplish the task asked of them. In this group, the links made between experience and situation in learning formed

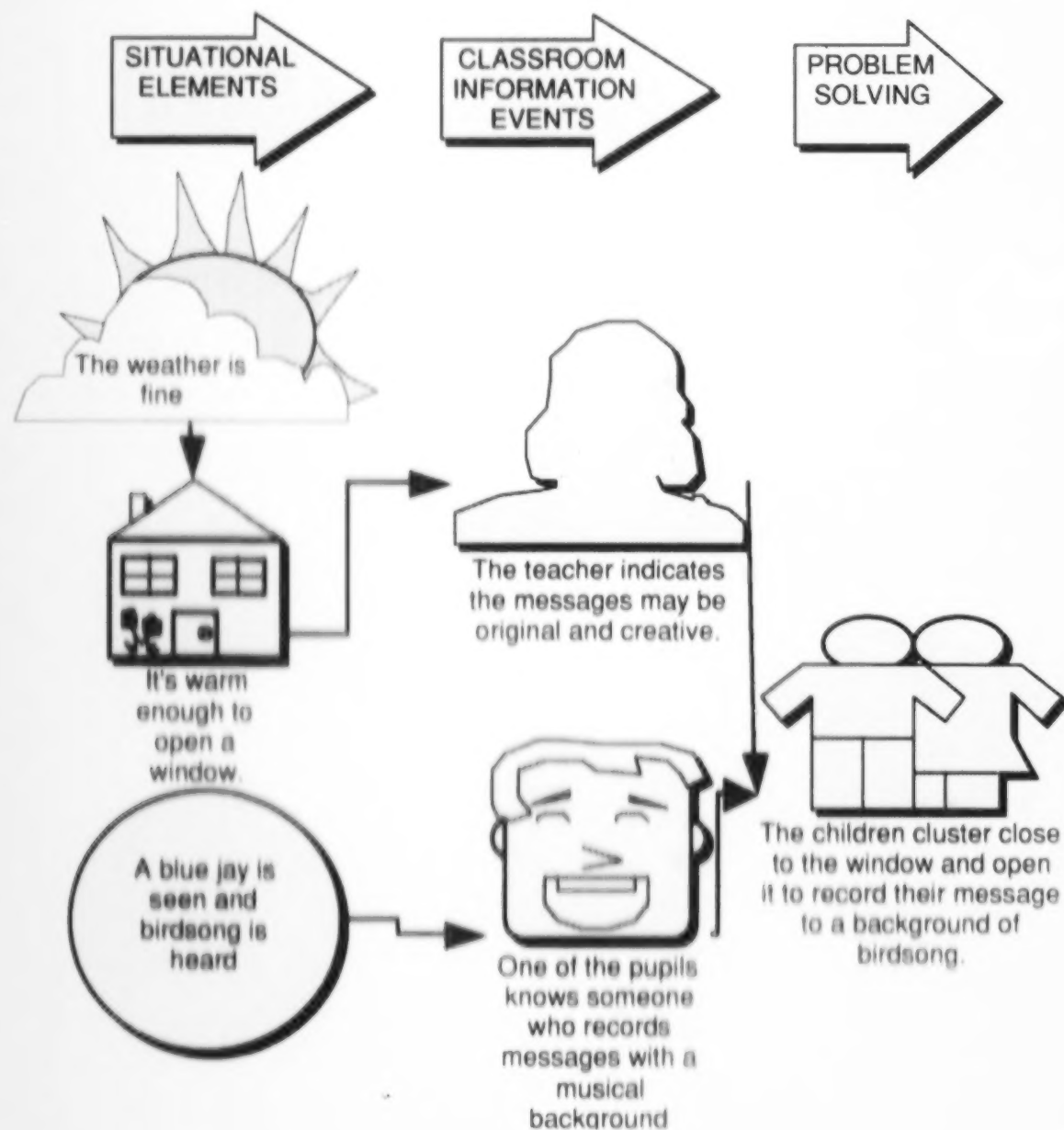


Figure 3 Contextual links in learning

one of the methods for creating an original message.

We must beware of giving in to the otherworldliness of this description (the flip side of the Bartlett effect). The notes taken by one observer during this research project show that all is not all sweetness and light in rural schools in early spring — "10:57-10:59: two kids are making a commotion; 11:17-11:20: three are fighting; 11:21-11:22: generalized confusion." Here, however, is a new index of the importance of the links between situation and task, taken from another class.

The student-teacher-regulated group has decided to focus its message on preparations for Christmas. The date is 6 December. They sing "We Are the World, We Are the Children" then "Santa Claus is Coming to Town," and last, softly, "♪ Frosty the Snowman ♪." The group decides there is too much noise; they have to go to another room. Their objective is focused on Christmas celebrations and fits into the general atmosphere of the school, which has just been decorated. Other classroom activities are also focused on Christmas. "We could do 'Frosty the Snowman,' but the song is too long." The student teacher: "Hello! My little elves and I ..." — the student teacher takes over a large part of the message, after which the pupils introduce themselves one by one and then sing together. One pupil holds down the "OGM rec" button. "That wasn't very good, let's do it over again!" The student teacher: "I'm not going to do the ho-ho-ho again. We have to assign this differently." "We need little bells" — they go to look for little bells — "Where will we have the bells?" "All the way through." They work on fine-tuning their message right till the last minute, and at the end, close their message with "Happy Holidays!" in chorus. What we are witnessing here is a systematic integration of elements of the environment into task accomplishment. Following the session, the student teacher said:

Marielle started it; I don't know whose idea it was. It was one of the pupils saying that we could use Christmas music. They ran with the idea of "Let's have a party" and because it's Christmas time, they wanted to hear music. And as it happened, I had Christmas music on the tape recorder; I went along with their idea.

In a third class as well, the message was indexed to an event that was close in time: since the pupils had previously practiced reading and making up jokes, they poured the idea back into their activity. The role played by context is unmistakable. There was a conceptual link on which the activity was built. During postactive reflection on her group's learning interaction, the student teacher mused:

In my group, things started off quietly, because it consisted of two girls and a boy and the boy didn't seem to want to take part in making up a text, a story. I had to take a pretty active role to get things started. But once it did start, it went very well. They had to write their idea down. They had difficulty doing it jointly and sharing. At one point, I told them it would be good for all three to get involved. At last Michel decided to participate in the message, just towards the end. He was prepared to say nothing more than "Hello." The jokes predominated. They had been learning about jokes, so the idea came to them to do something humorous. They took their inspiration from the Garfield comic strip and their joke. At last I suggested they themselves make up something funny, rather than doing a story over again. They ended up finding something by working on the joke and Garfield and all the ideas that came to them. One girl went to look for her joke book. She suggested the jokes in the book, reading them aloud, but I said to them "Does that really tie in with the idea of leaving a message?" I tried to bring it back round to the idea of an answering machine message.

In this situation, what develops is that situational links created by the pupils lead them to leave behind the disciplinary genre presented as the search for an authentic experience; this obliges the student teacher to standardize their creativity, which is then once again dictated by the context (joke book). In spite of everything, both pupils and student teacher are reassured by linking this new activity to one they have already mastered. They thus bring the two activities together, and the links made help produce their zone of proximal development. What remains to be done is to bring together these ideas while finding a way to accommodate divergent suggestions. This orally negotiated locus of agreement ends by defining this group's learning process.

In this instance, as in many others that can't be presented here for lack of space, it would seem that the principle of analogous congruence is fundamental to learning — the principle that invites one to tie together conceptual elements using, for example, a situational image or a metaphor. In general, learning was envisaged as a difference that needed to be overcome in problem-space $A \longleftrightarrow B$. If we accept what is currently believed by researchers in the field of creativity, the problem's definition constitutes a significant component of its solution (Runco & Chand, 1995). On this view, the problem-space is defined not by the difference A-B but by the development of a congruence $A \longleftrightarrow B$ that will satisfy the transformational requirements of learning and will be in line with a psychosocial disposition of the pupils (De Corte, 1995). Through successive adjustments, the definition models the goal of the task such that it is aligned with more encompassing goals; as the process unfolds, the task criteria are refined and are realized in line with a dual intentionality, one that is both personal and collective. Academic goals are treated as specific instances integrated into personal and social goals and based on information present in the context of the task. The link between knowledge depends on past experience and is constructed using information available in the task setting.

In this section, we have seen that the links between experience and situation subtly underpin learning when pupils are given a certain freedom to model action as they desire. These links can be created with elements from the immediate setting, which corresponds to the co-construction of situation models. Through analogy, indexation contributes to the process of bringing together pieces of information that were distant from each other and thus defines the authentic learning zone.

BEYOND DISCIPLINARY GENRES: WHEN LEARNING IS OTHERNESSING

In language teaching, disciplinary genres represent particular situation models specific to language situations. Since it is no longer possible to think of language didactics as a simple working out of applied linguistics, the language situations studied in class are intertwined with experiences that aim for authenticity. Thus concerns that are both didactic (i.e. disciplinary) and

pedagogical flow together and intersect. At this juncture, oral communication plays an essential role. To the extent that language experience is situated in action, the premises for action come up against the proposed genre of action, as part of a situation the pupil may model very differently from the planned didactic model. This is all the more likely if the teacher works from a logic of appropriation and co-construction of knowledge, leaving a part of the experience up to the pupil to decide on.

While one part of action in language didactics may correspond to a frame of reference imposed by the language genre, its integration into practice prompts the emergence of models that exceed the bounds of disciplinary genres. These models the pupil makes his or her own and reinterprets according to the social, mental, and physical context. The demonstration presented in this paper has led me to reexamine the concept of "school genre" (*genre scolaire*) put forward by Schneuwly & Dolz (1997), in the light of inductive situation models (Holland, Holyoak, Nisbett, & Wilson, 1990). These models constitute hierarchical structures of situational interpretation that compete with the genres presented, experienced, and thus reinterpreted. Situation models compete with the didactic genre. They may "yield" to the genre, or they may supplant the performance of the genre and produce an "other-authentic-thing" specific to situated practice; such a practice is not exclusively language-based.

On the didactic level, one important implication for the teacher of the model presented is the need to pay much attention to learners' experiential knowledge. As is shown by Figure 4, this experiential knowledge is of two kinds: 1) Biographical — this kind models the premises for action in a learning situation. 2) Situated — this kind is an integral part of the learning situation, even if the teacher didn't anticipate this beforehand. The need to take account of experiential, biographical, and situated knowledge involves the teacher in new experiences when it comes to the dialogue with the learner (what has he or she learned in relation to the subject of instruction?). This is equally so as regards organization of the learning context «learning situation»; that is, it is important that the context provided pupils offer a wealth of learning and suit the goals targeted. One can imagine situations with the potential for varying disciplinary instruction (events, objects,

posters, directories, resources) which the pupil could use to build knowledge in didactic situations in a manner that was original and not fully prepared for.

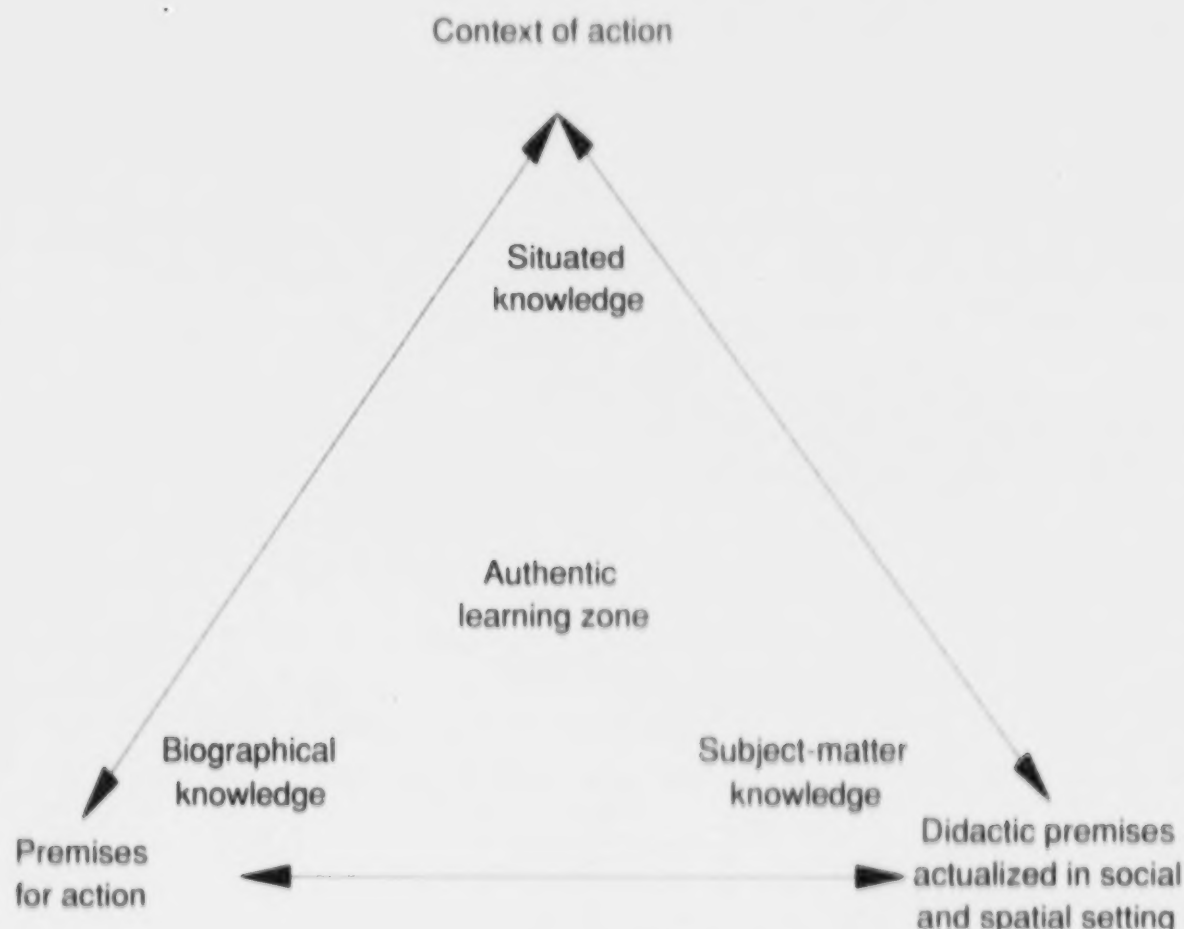


Figure 4. The pupil in the authentic learning situation

Certain schools of a new kind have been created on a related principle intended to free up the self-motivated flow of learning (Cziksenmihalyi, 1990). In rich and varied disciplinary contexts, pupils are given a choice among multiple disciplinary stimuli distributed throughout the classroom context and freely assemble their schedules, with the right to decide for themselves on the duration of a learning activity.

In this paper I have tried to explore subtle phenomena that are hard to grasp and that influence learning, whatever the methods used to plan those experiences — those experiences that, at a given point, escape a teacher's control because they become authentic. To echo Terwilliger (1997), it is not surprising that these experiences are hard to tie into criteria, but they exist nevertheless. Group learning develops freely on the basis of individual premises and the context of the task.

In this research project, as demonstrated as well in other publications (Tochon, 1998 and in press), several linked factors provide convincing confirmation of the importance of experiential knowledge in learning. Indeed, the links made between biographical premises and the context of the experience constitute a mode of group learning in language arts. Indexation subtly underpins learning by forming links with prior experience, including individual biography and the group's past history, and with relevant indices from the context of the task. Testing of my hypotheses suggests that it is possible to at least partly anticipate authentic experiences if we work on the tension between situations and the premises for action that trigger the pupil's prior knowledge. This could provide a middle way out of the opposition between criterion-referenced performance and communication without referential content. Thus the teacher can present conceptual premises on the basis of which pupils will design their projects.

Conclusion

In summary, this study has suggested that:

- Learning is governed by premises for action that are relative to the nature of the task. These may handicap or foster learning. Oral explicitation of these premises seems to be the necessary condition for conceptual change in a given discipline; it justifies the practice of questioning pupils systematically about their dispositions, the goals and nature of the task and their way of interpreting it.
- The situated knowledge of experience is integrated into the biography of individuals and groups in learning. Group learning is based in part on knowledge available in the task

setting. The creation of links between the task and contextualized experience constitutes a method of learning.

- Analysis of language practices in a school situation suggests that praxis entails going beyond didactic instruments and that an appropriation of the genre as an "other-authentic-thing" takes place simultaneously with the prescribed learning.

The school genres upon which a given discipline rests have a discursive and textual function, but it seems inevitable that they should be exceeded by experience. Better criterion referencing for didactic genres might promote certain academic changes if designed with the goal of ensuring better preliminaries to quasi-authentic experiences in the classroom. Nevertheless, even if the classroom becomes a place for communication and education, it remains hard to plan for open learning. If we want to allow the learner responsibility for a part of the decision-making in his or her learning, it might be better to think of the action of learning in terms of a set of instructional premises that articulate various potential experiences as suits the pupil, so that he or she can appropriate those conceptual elements liable to correspond to an original experience. What is here proposed is that in organizing disciplinary activities, teachers act on the two kinds of experiential knowledge integrated into the learning situation: biographic knowledge and situated knowledge. It would thus be up to the pupil to create his or her didactic situation using the various elements presented by the teacher. This aspect is especially important, for example, when multimedia facilities are used.

In this paper I have presented some proposals emerging from the search for the premises of authentic experiences in disciplinary didactics. The disciplines taught in classrooms are culturally bound by very specific types of discourse that shape curricula. They have been defined as didactic genres. These genres characterize the identity and culture of school experience in terms of the premises for specific types of actions. The didactic premises define the social goals assigned to knowledge in disciplinary situations. This feature implies that school genres are closely linked to the politics of knowledge. These disciplinary premises are pragmatic

phenomena; they correspond to an intentionality-based orientation. They design knowledge in time; they have a developmental characteristic. They give explicit form to a wording of their disciplines through school genres which can be told and written about. Hence, the genres of the subject-matter taught articulate the premises that posit states of mind, beliefs, and inclinations related to disciplinary knowledge. They are virtual reconstructions of the coherence of knowledge. One feature of school genres is thus eclecticism in search of coherence. In this light, "authentic" learning is in itself a school genre that hides a diversity of experiences and quasi-experiences (experiences of the words that design experiences may produce quasi-experiences).

A perspective is proposed on the role of didactic premises in disciplinary experience. According to this view, authentic experience cannot be fully anticipated, but it can be scaffolded in defining its premises. The perspective is mixed: top-down premises aim at bottom-up experience. On that score, the present proposal respects the situated logic of practice. The perspective of didactics as the enactment of disciplinary genres involves specific features that circumscribe the new field of inquiry. Similarity-based models emerge from communication experiences in a context of disciplinary teaching and learning. These prototypes or genres enter into a dialogue with situated, genuine experiences. Clusters of features derived from disciplinary genres may be assembled in premises that may provide the basis for genuine disciplinary experiences. This situated model of learning based upon didactic premises could instigate new research and practice on the ways of enacting instructional models in specific subject-matters.

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